

Before the  
**FEDERAL COMMUNICATIONS COMMISSION**  
Washington, D.C. 20554

In the Matter of	)	
	)	
Revision of the Commission's	)	CC Docket No. 94-102
Rules to Ensure Compatibility	)	
with Enhanced 911 Emergency	)	
Calling Systems	)	
	)	

To: The Commission

**UPDATE TO AMENDED E911 PHASE II  
REPORT OF TRITON PCS LICENSE COMPANY, L.L.C.**

Triton PCS License Company L.L.C. ("Triton"), by its attorneys, hereby submits this Update to its Amended E911 Phase II Report regarding its plans for implementation of wireless Enhanced 911 ("E911") Phase II automatic location information ("ALI") technologies. In accordance with Commission guidance, this Update is filed to report a change in the status of Triton's plans for E911 Phase II implementation.<sup>1</sup>

Triton's original report on Phase II implementation stated that Triton was not in a position to choose between a handset-based or network-based E911 solution.<sup>2</sup> In its Amended Report, filed on December 21, 2000, Triton reported that it believed a handset-based Phase II solution was its best option for Phase II implementation.<sup>3</sup> Specifically, Triton stated that it was

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<sup>1</sup> Wireless Telecommunications Bureau Provides Guidance on Carrier Reports on Implementation of Wireless E911 Phase II Automatic Location Identification, *Public Notice*, CC Docket No. 94-102, DA 00-2099 (rel. September 14, 2000).

<sup>2</sup> See Report of Triton PCS License Company, L.L.C., CC Docket No. 94-102 (filed November 9, 2000) ("Report").

<sup>3</sup> See Amended Report of Triton PCS License Company, LLC, CC Docket No. 94-102 (filed December 21, 2000) ("Amended Report").

working with handset manufacturers to develop a handset-based ALI solution through the use of global positioning system ("GPS") technology in TDMA subscriber handsets. However, Triton also stated that based on vendor availability, equipment availability, technological developments and other factors, it might need to submit an update to its Amended Report changing its ALI technology selection.

Manufacturers from which Triton planned to obtain Phase II-compliant handsets recently reported publicly that they will not be producing GPS-equipped TDMA handsets.<sup>4</sup> These manufacturers now have confirmed in correspondence with Triton that GPS-equipped TDMA handsets will not be available for use in Triton's Phase II implementation program.<sup>5</sup> As a result, Triton has concluded that it can no longer pursue a pure handset-based approach to E911 Phase II implementation for its existing TDMA network. In addition to this significant development, Triton's Phase II strategy is affected by its plans to deploy a GSM "overlay" network that ultimately may replace its current TDMA facilities. Thus, Triton is in the process of developing, on an expedited basis, an alternative approach to its Phase II implementation.

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<sup>4</sup> See Comments of Nokia Inc. on AT&T Wireless Phase II Waiver, CC Docket No. 94-102 (filed May 7, 2001) at 6 ("due to certain marketing, technical and cost issues, we [will] not be developing GPS-equipped TDMA handsets"); see also Comments of Motorola, Inc., CC Docket No. 94-102 (filed May 7, 2001) at 3-4 ("Motorola will have very little new product development for TDMA handsets and . . . has not planned for the development of handset-based location technology for TDMA handsets").

<sup>5</sup> See Attachment 1 (Letter from Michael Flemming, Nokia Mobile Phones, to Jim Sheehan, TritonPCS, dated June 8, 2001), Attachment 2 (Letter from Lenny Frucht, Motorola, to Jim Sheehan, TritonPCS, dated June 5, 2001) and Attachment 3 (Letter from Robert J. Miklosko, Panasonic, to Jim Sheehan, TritonPCS, dated May 30, 2001).

Because Triton now must alter significantly its E911 Phase II implementation plans as a result of the unavailability of its planned TDMA handset-based solution, the timing of Triton's Phase II deployment may be adversely affected. Thus, although Triton is working diligently to develop an alternative Phase II approach and will proceed rapidly with implementation, Triton likely will require a waiver of the FCC's E911 rules in connection with the deployment of its alternative Phase II solution. The nature and extent of such a waiver can be determined only after Triton has evaluated the potential alternatives available to it and adopted a new E911 Phase II implementation strategy. Triton is committed to working as quickly as possible to achieve an implementation strategy.

**I. Background/Contact Information**

**A. Triton's Background**

Through its parent, Triton PCS Holding Company, Inc., Triton is the first member of the AT&T Wireless Services Inc. network of affiliates. The company markets its wireless services under the brand SunCom. Triton is licensed to build and operate a digital wireless network in a contiguous area covering approximately 13 million people in Virginia, North and South Carolina, northern Georgia, northeastern Tennessee and southern Kentucky. Triton commenced service to the public in January 1999, and currently operates a network of seven mobile switches and over 1500 cell sites. Triton's TRS Number is **817978**.

**B. Triton's Contact Information**

For the purpose of responding to the Commission's inquiries on Triton's plans for E911 Phase II, Triton's contact information is as follows:

Triton PCS  
Glen Robinson  
Senior Vice President of Engineering  
and Information Technologies  
1100 Cassatt Road  
Berwyn, PA 19312  
Telephone: (610) 722-4424  
Facsimile: (610) 993-2683  
E-Mail: grobinson@tritonpcs.com

## **II. E911 Phase II Location Technology Information**

As discussed in the Amended Report, Triton has worked with TDMA handset vendors to pursue a handset-based Phase II solution for its TDMA network to satisfy fully the Commission's implementation requirements and bring E911 Phase II service to its subscribers in the shortest possible timeframe. However, the manufacturers from which Triton planned to obtain Phase II-compliant handsets no longer plan to produce GPS-equipped TDMA handsets. For example, in its comments on the request of AT&T Wireless Services, Inc. ("AT&T") for waiver of the E911 Phase II implementation rules, both Nokia and Motorola indicated that they will not be producing GPS-equipped TDMA handsets.<sup>6</sup>

Furthermore, Triton's prospective handset vendors now have confirmed that GPS-equipped TDMA phones will not be available for use in Triton's E911 Phase II program. Nokia informed Triton that "due to certain marketing, technical and cost issues, we will not be

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<sup>6</sup> See Comments of Nokia Inc. on AT&T Wireless Phase II Waiver, CC Docket No. 94-102 (filed May 7, 2001) at 6; *see also* Comments of Motorola, Inc., CC Docket No. 94-102 (filed May 7, 2001) at 3, 4.

developing GPS-equipped TDMA handsets.”<sup>7</sup> Similarly, Motorola indicated that it “will not have a handset-based location technology available for the TDMA air interface in time for the October 1, 2001 deadline promulgated by the Commission.”<sup>8</sup> Finally, Panasonic stated that “TDMA handsets currently in production for the U.S. market do not include specific handset-based technology support for automatic location identification,” and that “Panasonic intends to focus investigation of alternative handset-based solutions towards future products based on GSM and next generation wireless access technologies” rather than TDMA technology.<sup>9</sup> Because manufacturers no longer plan to produce GPS-equipped TDMA handsets, Triton cannot pursue the Phase II solution it initially adopted.

In addition, as an affiliate member of the AT&T Wireless Network, Triton is directly affected by AT&T’s decisions related to network technologies. For example, on November 30, 2000, AT&T announced a strategic alliance with NTT DoCoMo to develop next generation mobile multimedia services.<sup>10</sup> To speed the introduction of new wireless services, AT&T will overlay a GSM platform on its existing TDMA network. To maintain consistency and smooth interoperability with AT&T’s network, Triton plans to implement a similar GSM overlay strategy in the regions it serves. Accordingly, Triton is in the process of developing an

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<sup>7</sup> See Attachment 1 (Letter from Michael Flemming, Nokia Mobile Phones, to Jim Sheehan, TritonPCS, dated June 8, 2001).

<sup>8</sup> See Attachment 2 (Letter from Lenny Frucht, Motorola, to Jim Sheehan, TritonPCS, dated June 5, 2001).

<sup>9</sup> See Attachment 3 (Letter from Robert J. Miklosko, Panasonic, to Jim Sheehan, TritonPCS, dated May 30, 2001).

alternative, hybrid Phase II solution for its existing TDMA system and its follow-on GSM network.

**A. Type of Technology**

Because Triton has confirmed that GPS-equipped TDMA handsets will be unavailable, it has embarked upon a search for other Phase II technologies. However, Triton has not yet adopted a new, comprehensive E911 Phase II implementation plan. Triton is proceeding as rapidly as possible with the evaluation and selection of alternative Phase II approaches. In this connection, Triton recently issued a formal Request for Proposal ("RFP") seeking information from vendors on available network-based wireless location systems and services, and is in the process of reviewing the responses submitted by prospective vendors. In addition, Triton is evaluating independently other potential Phase II technologies. Triton anticipates submitting additional updates and related filings to the Commission after it has evaluated the proposals received in response to the RFP and completed its independent assessment of Phase II solutions for its TDMA and planned GSM overlay facilities.

**B. Testing and Verification**

Triton has requested that detailed information concerning proposed network-based Phase II solutions, including test results, be submitted in response to its RFP. Triton's evaluation of the proposals and accompanying technical information submitted in response to the RFP remains ongoing.

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<sup>10</sup> See AT&T and NTT DoCoMo Announce Strategic Wireless Alliance, *Press Release* (November 30, 2000).

**C. Implementation Details and Schedule**

Because Triton has no alternative at this stage but to develop and adopt a new, comprehensive E911 Phase II implementation plan, it is not yet possible to provide the Commission with a detailed implementation schedule and related information. Triton will provide this information to the Commission when an alternative Phase II solution for its TDMA system, as well as its anticipated GSM overlay network, have been selected.

As stated previously, because Triton now must alter substantially its E911 Phase II implementation plan, the timing of Triton's Phase II deployment may be delayed. Accordingly, Triton likely will require a waiver of the FCC's E911 rules in connection with the deployment of its alternative Phase II solution. The nature and extent of any such waiver can be determined only after Triton has completed evaluation of potential alternatives and adopted a new E911 Phase II implementation plan.

**D. PSAP Interface**

Until Triton has adopted a new E911 Phase II implementation plan, it is not possible to provide the Commission with complete information concerning PSAP interface issues. However, at this time, Triton is actively working with PSAPs and its E911 Phase I providers to convert the PSAP interface to non-call path associated signaling ("NCAS") to accommodate the increased messaging requirements resulting from implementation of E911 Phase II capabilities. Because the PSAP interface will not change significantly as a result of the type of Phase II technology ultimately selected, Triton will continue with its NCAS conversion efforts. Triton will provide additional information to the Commission concerning PSAP interface issues when it has selected an alternative Phase II solution.

**E. Existing Handsets**

It is not possible to provide the Commission with complete information regarding the treatment of existing TDMA handsets because Triton has not yet adopted an alternative E911 Phase II implementation plan. Triton expects, however, that its GSM overlay system will be Phase II-capable and will provide enhanced ALI information from the commencement of service. Triton will provide additional information on these issues to the Commission when an alternative Phase II solution has been selected.

**F. Location of Non-Compatible Handsets**

Until it adopts a new, alternative Phase II implementation plan, Triton cannot provide the Commission with specific information concerning its location capabilities for non-compatible handsets. At a minimum, however, non-subscribers to Triton service with network-based systems roaming into a Triton market will receive Phase I capabilities within the PSAP areas that are Phase I capable. Triton will provide additional information regarding this issue after it selects an alternative Phase II solution.

**G. Other Information**

Triton remains dedicated to implementing E911 Phase II ALI capabilities that comply with the Commission's accuracy requirements as rapidly as possible. As was the case with its previous handset-based Phase II solution, however, Triton cannot control equipment availability or delivery timetables of equipment manufacturers and service vendors. Further, Triton ultimately cannot guarantee that the alternative technology it adopts will deliver consistently the high degree of accuracy and integration that the Commission's rules mandate. Thus, while Triton is working diligently to evaluate and select an appropriate alternative Phase II solution,



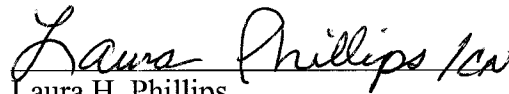
Triton likely will have to seek rule waivers where it concludes that implementation timetables or ALI accuracy cannot be achieved using currently available vendor equipment and technologies.

### **III. Conclusion**

Triton is committed to selecting and implementing an alternative E911 Phase II solution for its in-place TDMA network, and Phase II technology for its planned, follow-on GSM overlay network, as rapidly as possible. Triton will submit further updates and related filings to the Commission promptly upon the adoption of its new, comprehensive Phase II implementation plan. If questions should arise in connection with this submission, please contact the undersigned.

Respectfully submitted,

**TRITON PCS LICENSE COMPANY, L.L.C.**

A handwritten signature in cursive script, appearing to read "Laura Phillips /cn".

Laura H. Phillips

Carlos M. Nalda

**Dow, Lohnes & Albertson, PLLC**

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Its Attorneys

### **Triton PCS**

Glen Robinson

Senior Vice President of Engineering  
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1100 Cassatt Road

Berwyn, PA 19312

(610) 722-4424

June 11, 2001

## **ATTACHMENT 1**

Nokia Mobile Phones

June 8, 2001

Mr. Jim Sheehan  
Director, Equipment and Logistics  
TritonPCS  
1100 Cassatt Road  
Berwyn, PA 19312

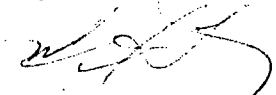
Dear Jim,

Per our conversation of June 7, 2001 and referencing FCC Docket number 94-102, this letter is intended to clarify for TritonPCS Nokia's intentions with regard to GPS as a location technology solution for TDMA.

Nokia is a major handset vendor for TritonPCS. Nokia has evaluated several possible location technology options for TDMA. Nokia's position with regards to GPS as a location based technology for TDMA is this: due to certain marketing, technical and cost issues, we will not be developing GPS-equipped TDMA handsets. This decision was made because there was insufficient demand for such handsets and Nokia did not believe that they could have been competitive in the market for all product categories due to increased costs and form factor changes.

Thank you Jim. If you have any further questions or concerns, please do not hesitate to contact me.

Regards,



Michael Flemming, Carrier Strategy Manager

Nokia Mobile Phones

16710 N.E. 79<sup>th</sup> Street, Suite 202  
Redmond, WA 98052  
(425) 867-5440

## **ATTACHMENT 2**



**MOTOROLA**

June 5, 2001

Mr. Jim Sheehan  
Director of Equipment/Logistics  
Triton PCS  
1100 Cassatt Road  
Berwyn, PA 19312

Dear Jim:

Going forward, Motorola has limited the scope of its research and development for TDMA handsets, and feels that the potential for TDMA handset-based location technology is not promising.

Motorola does not build TDMA network infrastructure and therefore is not in a position to comment on the merits of any TDMA network based location technology. However, Motorola has been a leading supplier of TDMA handsets and has reduced development of TDMA products for a number of reasons. TDMA is, essentially, a second generation technology that does not have a simple transition path to more advanced systems with richer features. In contrast, both GSM and CDMA have well established and recognized migration paths to 2.5 generation and 3<sup>rd</sup> generation advanced systems. Because of the desires of wireless providers to ensure a next generation transition path, Motorola is realigning resources and portfolios towards GSM and CDMA.

In light of these events, Motorola will have very little new product development for TDMA handsets and, based on an apparent lack of future demand, has not planned for the development of handset-based location technology for TDMA handsets. Therefore, Motorola will not have a handset-based location technology available for the TDMA air interface in time for the October 1, 2001 deadline promulgated by the Commission.

Please let me know if you have any questions.

Regards,

A handwritten signature in cursive script that reads "Lenny Frucht".

Lenny Frucht  
Sr. Regional Business Manager

## **ATTACHMENT 3**

# Panasonic

**Matsushita Mobile Communications  
Development Corporation of U.S.A.**  
Corporate Office

1225 Northbrook Parkway  
Suite 2-400  
Suwanee, GA 30024

770.338.6000  
770.338.6210 Fax

May 30, 2001

Mr. Jim Sheehan  
Director Equipment and Logistics  
Triton PCS  
1100 Cassatt Road  
Berwin, PA 19312

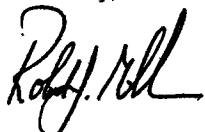
Dear Mr. Sheehan:

This letter is in response to your inquiry regarding Panasonic's plans to support E-911 functionality. Panasonic TDMA handsets currently in production for the U.S. market do not include specific handset-based technology support for automatic location identification. Several operators have disclosed in public filings their intent to satisfy FCC requirements via network overlay systems which will work with all TDMA handsets, including current and future Panasonic TDMA handsets. Given this along with current technological and market limitations associated with proposed handset-based solutions and anticipated decline in TDMA handset demand, Panasonic intends to focus investigation of alternative handset-based solutions towards future products based on GSM and next generation wireless access technologies.

As always we endeavor to meet and exceed customer and market expectations and hope we can satisfy your future product needs.

Please do not hesitate to contact me should you require further information.

Sincerely,



Robert J. Miklosko

Director, Product Planning